

In the Claims:

Please cancel claims 1-14 and add the following new claims 15-51. Following is a complete listing of the claims pending in the application, as amended:

1-14. (Cancelled)

15. (New) A method of controlling brakes of multiple brake vehicle, comprising:

receiving a signal corresponding to a speed of the vehicle when braking;

receiving a signal corresponding to a desired braking intensity;

comparing the speed of the vehicle with a preset value for the vehicle speed only at at least approximately the moment at which a brake application is detected;

comparing the desired braking intensity with a preset range for braking intensity at least twice during braking; and

if the speed is below the preset value for the vehicle speed and the desired braking intensity is outside the preset range for the braking intensity, directing a signal to disable at least one brake during braking and thereafter directing a signal to selectively disable a different brake during a succeeding brake application.

16. (New) The method of claim 15, further comprising detecting the speed of the vehicle when braking, and transmitting the signal corresponding to the speed of the vehicle when braking.

17. (New) The method of claim 15, further comprising detecting the desired braking intensity and transmitting the signal corresponding to the desired braking intensity.

18. (New) The method of claim 15 wherein comparing the desired braking intensity at least twice during braking includes comparing the desired braking intensity continuously throughout braking.

19. (New) The method of claim 15, further comprising selectively disabling at least one of the brakes.

20. (New) The method of claim 15 wherein directing a signal to selectively disable at least one of the brakes includes directing a signal to selectively disable half the brakes of the vehicle.

21. (New) The method of claim 15 wherein directing a signal to selectively disable at least one of the brakes includes directing a signal to selectively disable more than half the brakes of the vehicle.

22. (New) The method of claim 15, further comprising:
receiving a signal corresponding to a brake temperature; and
if the brake temperature is above a predetermined value, preventing disabling of the at least one brake.

23. (New) The method of claim 15 wherein directing a signal to disable at least one brake includes directing the signal when the desired braking intensity is below a preset value for the braking intensity.

24. (New) The method of claim 15, further comprising directing a signal to re-enable the at least one disabled brake upon receiving an indication that the desired braking intensity is within the present range for the braking intensity.

25. (New) The method of claim 15 wherein receiving a signal corresponding to a speed of the vehicle includes receiving a signal corresponding to the speed of an aircraft.

26. (New) A system for controlled application of braking pressure, comprising:
a brake release logic circuit portion;
first receiving means for receiving a signal corresponding to a vehicle speed;
second receiving means for receiving a signal corresponding to an input braking intensity;
a brake disable control circuit portion;
means for coupling the signal corresponding to the vehicle speed and the signal corresponding to the input braking intensity to an input of the brake disable control circuit portion that includes comparing means, the comparing means being configured to:
compare the signal corresponding to the input braking intensity with a first predetermined value of braking intensity to detect when a brake application has been commanded;
when a brake application has been detected, compare the signal corresponding to the vehicle speed with a predetermined value of vehicle speed;
when the signal corresponding to the vehicle speed is greater than the predetermined speed, direct a signal to prevent disablement of any brakes;
compare the signal corresponding to the input braking intensity with a second predetermined value of braking intensity at least twice; and
when the signal corresponding to the input braking intensity is greater than the second predetermined value of braking intensity, direct a signal to prevent disablement of any brakes.

27. (New) The system of claim 26, further comprising means for speed detection positioned to detect the speed of the vehicle when braking and transmit the signal corresponding to the speed of the vehicle when braking.

28. (New) The system of claim 26, further comprising means for braking intensity detection positioned to detect the input braking intensity and transmit the signal corresponding to the input braking intensity.

29. (New) The system of claim 26 wherein the means for coupling is configured to compare the signal corresponding to the input braking intensity continuously throughout braking.

30. (New) The system of claim 26 wherein the brake disable control circuit portion is configured to selectively disable half the brakes of the vehicle.

31. (New) The system of claim 26 wherein the brake disable control circuit portion is configured to selectively disable more than half the brakes of the vehicle.

32. (New) The system of claim 26, further comprising a brake temperature sensor positioned to detect a temperature of the brakes and transmit a signal corresponding to the temperature, and wherein the means for coupling is configured to receive the signal corresponding to the temperature and, if the brake temperature is above a predetermined value, prevent disabling of the at least one brake.

33. (New) A method for controlling a vehicle braking system, comprising:
providing a first back force on a brake pedal when the brake pedal is depressed to a first pedal deflection point and when the braking system has a first braking effectiveness; and

providing a second back force on the brake pedal when the brake pedal is subsequently depressed to a second pedal deflection point and when the braking system has a second braking effectiveness different than the first braking effectiveness, wherein the second pedal deflection point is at least approximately the same as the first pedal deflection point, and wherein the second back force is different than the first back force.

34. (New) The method of claim 33 wherein providing a first back force includes providing a first back force as a function of pedal deflection in accordance with a first schedule, and wherein providing a second back force includes providing a second back force as a function of pedal deflection in accordance with a second schedule different than the first schedule.

35. (New) The method of claim 33 wherein providing first and second back forces on a brake pedal includes providing first and second back forces on an aircraft brake pedal.

36. (New) The method of claim 33 wherein providing a first back force when the braking system has a first effectiveness includes providing a first back force when the braking system has a first number of enabled brakes, and wherein providing a second back force when the braking system has a second effectiveness includes providing a second back force when the braking system has a second number of enabled brakes, the second number being different than the first number.

37. (New) An apparatus for controlling brakes for multiple brake vehicles, comprising:

- a first receiving circuit portion configured to receive a signal corresponding to a vehicle speed;

- a second receiving circuit portion configured to receive a signal corresponding to an input braking intensity;

a brake release circuit portion configured to direct brake release;
a brake disable circuit portion configured to direct brake disablement; and
a comparison circuit portion operatively coupled among the first and second receiving circuit portions, the brake release circuit portion and the brake disable circuit portion, the comparison circuit portion being configured to:

compare the signal corresponding to the input braking intensity with a first predetermined value of braking intensity to detect when a brake application has been commanded;

when a brake application has been detected, compare the signal corresponding to the vehicle speed with a predetermined value of vehicle speed;

direct a signal to prevent disabling of any brakes when the signal corresponding to the vehicle speed is greater than the predetermined speed;

compare the signal corresponding to the input braking intensity with a second predetermined value of braking intensity at least twice during braking;
and

direct a signal to prevent disabling of any brakes when the signal corresponding to the input braking intensity is greater than the second predetermined value.

38. (New) The apparatus of claim 37, further comprising a speed detector positioned to detect the speed of the vehicle when braking and transmit the signal corresponding to the speed of the vehicle when braking.

39. (New) The apparatus of claim 37, further comprising a braking intensity detector positioned to detect the input braking intensity and transmit the signal corresponding to the input braking intensity.

40. (New) The apparatus of claim 37 wherein the comparison circuit portion is configured to compare the signal corresponding to the input braking intensity continuously throughout braking.

41. (New) The apparatus of claim 37 wherein the brake disable circuit portion is configured to selectively disable half the brakes of the vehicle.

42. (New) The apparatus of claim 37 wherein the brake disable circuit portion is configured to selectively disable more than half the brakes of the vehicle.

43. (New) An apparatus, comprising:
a computer-based system for controlling brakes of multiple brake vehicle, the system including:
a first receiver portion configured to receive a signal corresponding to a speed of a vehicle when the vehicle is braking;
a second receiver portion configured to receive a signal corresponding to a desired braking intensity;
a first comparer portion configured to compare the signal corresponding to the speed of the vehicle with a predetermined value only at at least approximately the moment at which a brake application is detected;
a second comparer portion configured to compare the signal corresponding to the desired braking intensity with a predetermined range for braking intensity at least twice during braking; and
a disabling portion configured to direct disablement of at least one of the brakes if the speed is below the predetermined value for the vehicle speed and the desired braking intensity is outside the predetermined range for the braking intensity, the braking portion further being configured to direct disablement of another of the brakes during a succeeding brake application.

44. (New) The apparatus of claim 43 wherein the disabling portion is configured to direct disablement of at least one of the brakes when the desired braking intensity is below a predetermined value for the braking intensity.

45. (New) The apparatus of claim 43, further comprising a speed detector positioned to detect the speed of the vehicle when braking and transmit the signal corresponding to the speed of the vehicle when braking.

46. (New) The apparatus of claim 43, further comprising a braking intensity detector positioned to detect the desired braking intensity and transmit the signal corresponding to the desired braking intensity.

47. (New) The apparatus of claim 43 wherein the second comparer portion is configured to compare the signal corresponding to the desired braking intensity continuously throughout braking.

48. (New) The apparatus of claim 43 wherein the disabling portion is configured to direct disablement of half the brakes of the vehicle.

49. (New) The apparatus of claim 43 wherein the disabling portion is configured to direct disablement of more than half the brakes of the vehicle.

50. (New) The apparatus of claim 43, further comprising the vehicle.

51. (New) The apparatus of claim 43, further comprising the vehicle, and wherein the vehicle includes an aircraft having a fuselage, wings depending from the fuselage, and landing gear, with the system for controlling brakes being operatively coupled to the landing gear.